

**Notice of Allowability**

Application No.

10/084,776

Applicant(s)

PANICCIA, MARIO J.

Examiner

John D. Lee

Art Unit

2874

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on October 6, 2003.
2. ☒ The allowed claim(s) is/are 1-3 and 5-30.
3. ☒ The drawings filed on 06 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).  
\* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
(a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.  
(b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.  
(c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <input type="checkbox"/> Notice of References Cited (PTO-892)  | <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____               | <input checked="" type="checkbox"/> Examiner's Amendment/Comment                  |
| <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | <input type="checkbox"/> Other  |

### **EXAMINER'S AMENDMENT**

An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR § 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

- ✓ In claim 12, line 2, "a" has been deleted;
- ✓ In claim 23, line 1, "the tuning" has been deleted;
- ✓ In claim 24, line 1, "the tuning" has been deleted; and
- ✓ In claim 29, line 1, "of claim" has been inserted before "25".

The above indicated amendments are required for purely grammatical purposes. No consultation with applicant or applicant's representative is deemed necessary.

### **EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE**

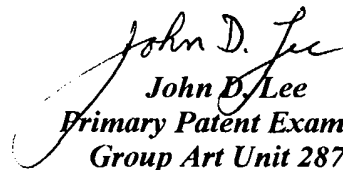
The following is an Examiner's Statement of Reasons for Allowance: After an updated search, U.S. Patent Application Publication 2003/0021305 A1 to Lundqvist, U.S. Patent 6,330,255 to Hung, and U.S. Patent 6,172,791 to Gill remain the closest prior art documents of record. Applicant has amended the claims of the present application to require that the optical modulator include a plurality of capacitors having charge modulated regions in the semiconductor substrate, and that the charge modulated regions of the capacitors modulate the optical beam generated from the gain medium when the optical beam is directed through the semiconductor substrate and through the charge modulated regions of the capacitors. After careful study of the Lundqvist, Hung, and Gill references, the Examiner agrees that the references do not

disclose or suggest these claim limitations. Only the Gill reference discusses capacitors in a waveguide coupling structure, but the Examiner agrees (for the reasons stated on page 16 of the latest response) that Gill's arrangement is totally different than that being claimed herein. Claims 1-3 and 5-30 herein are therefore allowed.

The ten (10) sheets of formal drawing filed on October 6, 2003, are acceptable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning the merits of this communication should be directed to Examiner John D. Lee at telephone number (703) 308-4886. The Examiner's normal work schedule is Tuesday through Friday, 6:30 AM to 5:00 PM. Any inquiry of a general or clerical nature (i.e. a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at telephone number (703) 308-0956, to the technical support staff supervisor (Team 2) at telephone number (703) 308-3072, or to the Technology Center 2800 Customer Service Office at telephone number (703) 306-3329.

  
**John D. Lee**  
**Primary Patent Examiner**  
**Group Art Unit 2874**